

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE UPGRADE OF ACCESSIBLE PEDESTRIAN SIGNAL AND COUNTDOWN PEDESTRIAN SIGNAL FOR THE THREE (3) PEDESTRIAN CROSSINGS TO CURRENT SHA STANDARDS AT THE INTERSECTION OF MD 28 (KEY WEST AVE./W. MONTGOMERY AVE) AND W. GUDE DR./FALLSGROVE DR. IN MONTGOMERY COUNTY.

MD 28 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION IS TO OPERATE IN A NEMA SIX PHASE, SEMI-TRAFFIC-ACTUATED MODE. THERE WILL BE AN EXCLUSIVE LEFT TURN PHASE FOR BOTH THE EAST AND WESTBOUND MOVEMENTS OF MD28. THE MD 28 THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY WITH A CONCURRENT PEDESTRIAN MOVEMENT ACROSS THE NORTH AND SOUTH LEGS OF THE INTERSECTION. THE W. GUDE DR./FALLSGROVE DR. THROUGH-MOVEMENTS WILL OPERATE CONCURRENTLY WITH AN ACTUATED PEDESTRIAN MOVEMENT ACROSS THE EAST LEG OF THE INTERSECTION.

THE AUDIBLE PUSHBUTTONS WILL FUNCTION AS FOLLOWS:

1. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL ANNOUNCE THE FOLLOWING MESSAGE:

NORTH LEG (BUTTONS 22p, 23p): "Wait to cross West Gude at West Montgomery, Wait."
SOUTH LEG (BUTTONS 16p, 17p): "Wait to cross Falls Grove at West Montgomery, Wait."
EAST LEG (BUTTONS 18p): "Wait to cross West Montgomery at Falls Grove, second pushbutton, Wait."
EAST LEG (BUTTONS 19p): "Wait to cross West Montgomery at Falls Grove, Wait."
EAST LEG (BUTTONS 20p): "Wait to cross West Montgomery at West Gude, Wait."
EAST LEG (BUTTONS 21p): "Wait to cross West Montgomery at West Gude, second pushbutton, Wait."

2. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

III. SPECIAL NOTES

1. MONTGOMERY COUNTY SHALL PERFORM THE INTERNAL WIRING OF THE CONTROLLER/CABINET. THE CONTRACTOR SHALL PURCHASE AND DELIVER THE AUDIBLE/TACTILE PUSHBUTTONS TO THE MONTGOMERY COUNTY TECH CENTER FOR INSTALLATION AND PROGRAMMING. THE CONTRACTOR SHALL CONTACT MS. EILEEN NORMAND AT 310-279-1291, AT LEAST THREE (3) DAYS PRIOR TO THE DELIVERY.
2. MAINTENANCE OF TRAFFIC WILL BE PERFORMED BY THE CONTRACTOR UTILIZING THE STANDARD PLATES FOR TRAFFIC CONTROL FROM SECTION MD 104.00 OF THE SHA BOOK OF STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES.
3. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES.

PROJECT CONTACTS

1. THE FOLLOWING ARE THE CONTACT PERSONS FOR THE PROJECT:

MS. ANYESHA MOOKHERJEE, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 513-7498

MR. DUANE BERNARD, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (301) 513-7385

MR. TOM FOUNTAIN, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 513-7304

MR. VICTOR CRAFTON, UTILITY ENGINEER
PHONE: (301) 513-7350

MS. CORREN JOHNSON, DIVISION CHIEF - TRAFFIC OPERATIONS, DOTS
PHONE: (410) 787-7630

MR. EDWARD RODENHIZER, CHIEF - SIGNAL SHOP
PHONE: (410) 787-7652

MR. EUGENE BAILEY, CHIEF - SIGN SHOP
PHONE: (410) 787-7676

EQUIPMENT LIST 'A'

A. EQUIPMENT TO BE SUPPLIED BY SHA AND INSTALLED BY THE CONTRACTOR.

CATEGORY CODE	QUANTITY	DESCRIPTION
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973023 73.5 SF FLAT SHEET ALUMINUM SIGNS CONSISTING OF:

GROUND- MOUNTED:

- 3 EA W11-2(L) (36" X 36")
3 EA W11-2(R) (36" X 36")
3 EA W16-7pL (24" X 12")
3 EA W16-7pR (24" X 12")

POLE- MOUNTED:

- 4 EA R10-3(1) COUNTDOWN PEDESTRIAN PUSHBUTTON SIGN "TO CROSS W. MONTGOMERY AVE." (9" X 15")
2 EA R10-3(1) COUNTDOWN PEDESTRIAN PUSHBUTTON SIGN "TO CROSS W. GUDE DR." (9" X 15")
2 EA R10-3(1) COUNTDOWN PEDESTRIAN PUSHBUTTON SIGN "TO CROSS FALLSGROVE DR." (9" X 15")

EQUIPMENT LIST 'B'

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

CATEGORY CODE	QUANTITY	DESCRIPTION
120500	1 LS	MAINTENANCE OF TRAFFIC
203030	1.5 CY	TEST PIT EXCAVATION
585405	175 FL	5" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585412	265 FL	12" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585424	150 FL	24" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
800000	8 EA	16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
800000	1 EA	REMOVE AND DISPOSE OF EQUIPMENT
800000	8 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
800000	105 LF	DISCONNECT, PULL BACK AND RE-ROUTE EXISTING CABLES
801004	1.5 CY	CONCRETE FOR SIGNAL FOUNDATION
801106	100 LF	WOOD SIGN SUPPORTS 4" X 6"
802501	80 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805105	70 LF	2" SCHEDULE 80 RIGID PVC CONDUIT - BORED
805125	20 LF	2" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
813014	73.5 SF	INSTALL GROUND MOUNTED SIGN
818004	4 EA	10' BREAKAWAY PEDESTAL POLE
861105	630 LF	ELECTRICAL CABLE - 2 CONDUCTOR NO. 14 AWG
861107	315 LF	ELECTRICAL CABLE - 5 CONDUCTOR NO. 14 AWG

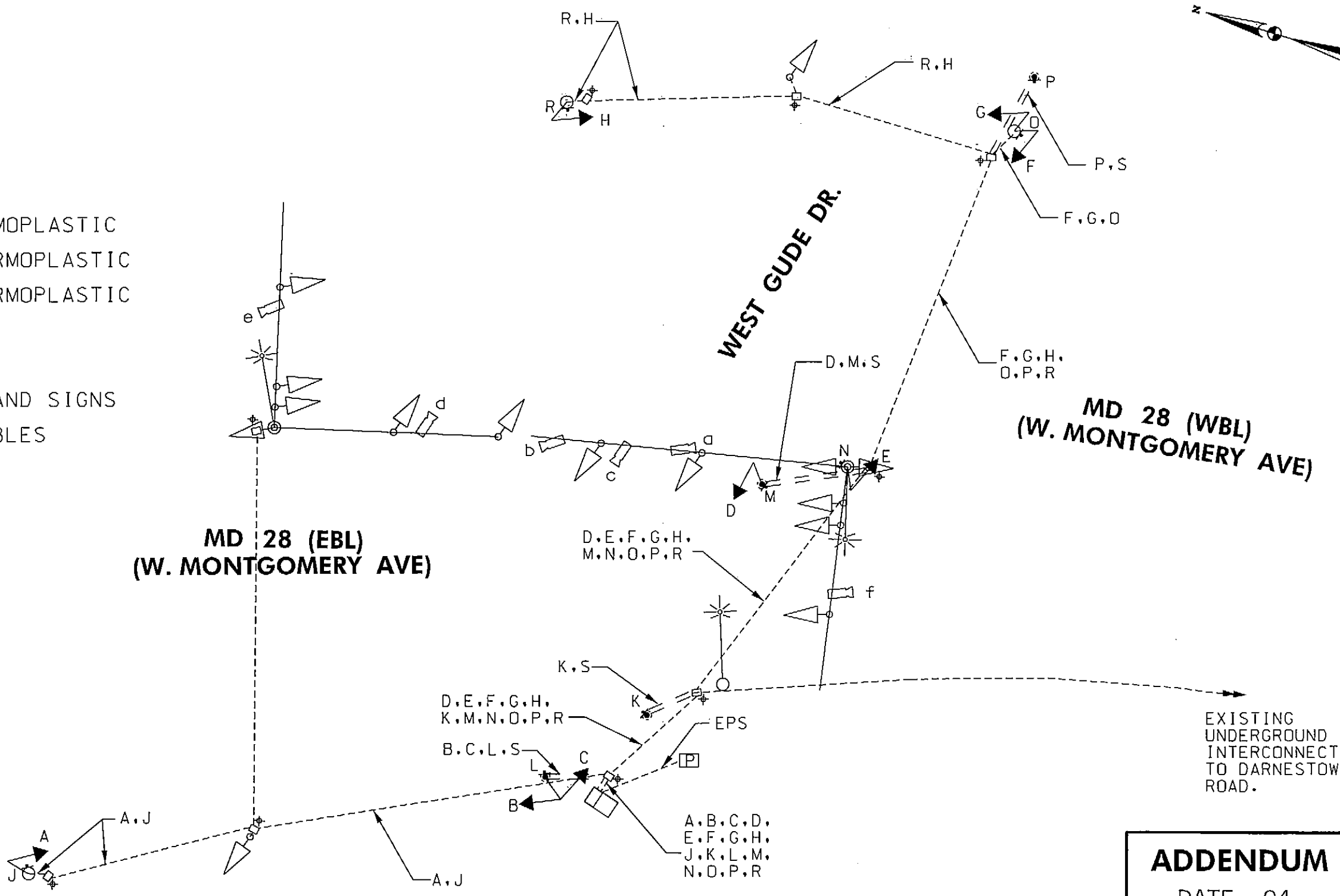
EQUIPMENT LIST 'C'

C. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Phase 1 & 5	←G→	←G→	R	R	←G→	←G→	←G→	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
1 & 5 Change to Phase 1 & 6 or Phase 2 & 5 or Phase 2 & Alt 4 or Phase 2 & 6	←G→	←G→	G	G	←R→	←R→	←R→	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
1 Change	←Y→	←Y→	G	G	←R→	←R→	←R→	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
Phase 2 & 5	←R→	←R→	R	R	←G→	←G→	←G→	G	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
5 Change	←R→	←R→	R	R	←Y→	←Y→	←Y→	G	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
Phase 2 & 6	←R→	←R→	G	G	←R→	←R→	←R→	G	G	R	R	R	R	R	R	WK	WK	DW	DW	DW	DW	WK	WK
Ped Clearance + Countdown	←R→	←R→	G	G	←R→	←R→	←R→	G	G	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW	DW	DW	FL/DW	FL/DW
2 & 6 Change	←R→	←R→	Y	Y	←R→	←R→	←R→	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
Phase 4 & 8	←R→	←R→	R	R	←R→	←R→	←R→	R	R	G	G	G	G	G	G	DW	DW	DW	DW	DW	DW	DW	DW
4 & 8 Change	←R→	←R→	R	R	←R→	←R→	←R→	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
Phase Alt 4	←R→	←R→	R	R	←R→	←R→	←R→	R	R	G	G	G	G	G	G	DW	DW	WK	WK	WK	WK	DW	DW
Ped Clearance + Countdown	←R→	←R→	R	R	←R→	←R→	←R→	R	R	G	G	G	G	G	G	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW
Alt 4 Change	←R→	←R→	R	R	←R→	←R→	←R→	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
Flashing Operation	FL/←R→	FL/←R→	FL/Y	FL/Y	FL/←R→	FL/←R→	FL/←R→	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM



WIRING LEGEND

A,B,C,H	- EXISTING 5 CONDUCTOR NO. 14 AWG ELEC. CABLE
J,K,L	- EXISTING 2 CONDUCTOR NO. 14 AWG ELEC. CABLE
D	- PROPOSED 5 CONDUCTOR NO. 14 AWG ELEC. CABLE
K,M,N,P	- PROPOSED 2 CONDUCTOR NO. 14 AWG ELEC. CABLE
S	- NO.6 AWG STRANDED BARE COPPER GROUND WIRE
EPS	- EXISTING POWER SERVICE
+	- EXISTING GROUND ROD

ADDENDUM NO. 2

DATE: 04 - - 13



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 28 (W. MONTGOMERY AVE.) AT
WEST GUDE DR./FALLSGROVE DR.
ROCKVILLE, MARYLAND

GENERAL INFORMATION SHEET

SCALE: NONE ADVERTISED DATE: APR 19, 2013 CONTRACT NO. MO1315177

DESIGNED BY LL COUNTY MONTGOMERY
DRAWN BY LL/BDL LOGMILE 150002824.09
CHECKED BY ENB/NMR TIMS NO. 1510
F.A.P. NO. AC-NHPP-G-5010(15)E TOD NO.

TS NO. 3340C DRAWING SG-02 OF 02 SHEET NO. 2 OF 2

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REVISION 'C' CEI PROJECT NO. 27257.49

PLOTTED: Wednesday, April 24, 2013 AT 03:58 PM
FILE: S:\2013\Transportation\27257.49 MD 28 Resurfacing\CADD\ACAD SheetSets\MD 28 at Gude D\pSSG-P000_MD28_W.Gude_GI.dgn